November 2002

Business Situation

Advance Estimates for the Third Quarter of 2002

E CONOMIC growth picked up in the third quarter of 2002, according to the "advance" estimates of the national income and product accounts (NIPA's). Real gross domestic product (GDP) and gross domestic purchases both increased 3.1 percent; in the previous quarter, GDP had increased only 1.3 percent, and purchases had increased 2.6 percent (table 1 and chart 1).¹ The price index for gross domestic purchases rose 1.4 percent after increasing 2.3 percent, as energy prices moderated. However, real disposable personal income slowed to a 2.7-percent increase after increasing 3.6 percent.

This article was prepared by Daniel Larkins and Frederick von Batchelder.

CHART 1 Selected Measures: **Change From Preceding Quarter** Percent 10 REAL GROSS DOMESTIC PRODUCT 5 10 REAL GROSS DOMESTIC PURCHASES 10 GROSS DOMESTIC PURCHASES PRICE INDEX 5 2002 1999 2000 2001 Note-Percent change at annual rate from preceding quarter. based on seasonally adjusted estimates

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The advance estimates for the third quarter also show the following:

• Consumer spending stepped up substantially and contributed 2.95 percentage points to third-quarter growth in real GDP after contributing 1.22 percentage points to second-quarter growth (table 2). Auto and truck purchases surged, mainly in response to aggressive sales-incentive programs that included generous rebates and zero-rate financing.²

Table 1. Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers

[Seasonally adjusted at annual rates]

	Billions of chained (1996) dollars				Percent change					
	Level	evel Change from preceding quarter				from preceding quarter				
	2002	2001	2002			2001 200		2002)2	
	III	IV	I	II	Ш	IV	I	П	Ш	
Gross domestic product	9,465.2	62.4	114.4	29.2	72.8	2.7	5.0	1.3	3.1	
Less: Exports of goods and services Plus: Imports of goods and services	1,071.2 1,562.4	-26.2 -19.8	8.8 29.9	34.9 75.8	5.7 9.5	-9.6 -5.3	3.5 8.5	14.3 22.2	2.1 2.5	
Equals: Gross domestic purchases	9,917.0	69.5	132.9	62.6	76.2	2.9	5.6	2.6	3.1	
Less: Change in private inventories	1.9	-36.6	69.5	33.8	-3.0					
Equals: Final sales to domestic purchasers	9,903.9	102.0	72.1	31.6	77.9	4.3	3.0	1.3	3.2	
Personal consumption expenditures Durable goods Nondurable goods Services	6,610.8 1,032.0 1,927.2 3,686.9	93.1 69.4 16.7 19.1	49.8 -16.1 36.4 25.6	28.6 4.8 -0.5 24.0	68.4 51.3 6.3 20.7	6.0 33.6 3.6 2.1	3.1 -6.3 7.9 2.9	1.8 2.0 -0.1 2.7	4.2 22.7 1.3 2.3	
Private fixed investment Nonresidential Structures Equipment and software Residential	1,573.4 1,182.8 221.8 976.7 385.4	-37.3 -35.3 -23.6 -6.1 -3.3	-2.0 -18.0 -9.5 -6.6 12.6	-3.8 -7.3 -11.5 7.7 2.5	0.8 1.7 -9.9 15.3 -0.7	-8.9 -10.9 -30.1 -2.5 -3.5	-0.5 -5.8 -14.2 -2.7 14.2	-1.0 -2.4 -17.6 3.3 2.7	0.2 0.6 -16.0 6.5 -0.8	
Government consumption expenditures and gross investment Federal	1,711.1 613.1 400.8 212.4 1,098.1	41.2 18.3 12.5 5.9 23.0	22.8 10.6 10.5 0.2 12.2	6.0 10.9 7.3 3.6 -4.6	7.8 4.4 5.0 -0.5 3.4	10.5 13.5 14.3 12.1 8.9	5.6 7.4 11.6 0.4 4.6	1.4 7.5 7.8 6.9 –1.7	1.8 2.9 5.1 -0.9 1.2	
Addendum: Final sales of domestic product	9,452.2	94.4	54.5	-1.5	74.3	4.2	2.4	-0.1	3.2	

Note. Chained (1996) dollar series are calculated as the product of the chain-type quantity index and the 1996 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates usually are not addiffus a fainted 1996 dollar levels and residuals, which measure the extent of nonadditivity in each table, are shown in NIPA tables 1.2, 1.4, and 1.6. Percent changes are calculated from unrounded data. Percent changes in major aggregates are shown in NIPA tables 5.1. (See "Selected NIPA Tables," which begins on page D-2 in this issue.)

^{1.} Quarterly estimates in the NIPA's are expressed at seasonally adjusted annual rates, unless otherwise specified. Quarter-to-quarter dollar changes are differences between these published estimates. Percent changes are calculated from unrounded data and annualized. "Real" estimates are in chained (1996) dollars, and price indexes are chain-type measures.

^{2.} In this article, "consumer spending" is shorthand for the NIPA series "personal consumption expenditures," "government spending" is shorthand for "government consumption expenditures and gross investment," and "inventory investment" is shorthand for "change in private inventories"

- A slowdown in imports (which are subtracted in the calculation of GDP) also contributed substantially to the acceleration in GDP growth.³ Exports also slowed, but only about half as much as imports.
- Spending by State and local governments turned up, adding 0.16 percentage point to third-quarter growth after subtracting 0.21 percentage point from second-quarter growth. Consumption expendi-

Table 2. Contributions to Percent Change in Real Gross Domestic Product

[Seasonally adjusted at annual rates]

	2001		2002	
	IV	1	II	III
Percent change at annual rate: Gross domestic product	2.7	5.0	1.3	3.1
Percentage points at annual rates: Personal consumption expenditures Durable goods Nondurable goods Services	4.05	2.22	1.22	2.95
	2.45	-0.55	0.16	1.73
	0.73	1.57	-0.02	0.27
	0.87	1.20	1.08	0.95
Gross private domestic investment	-2.88	2.53	1.16	-0.04
	-1.49	-0.07	-0.15	0.03
	-1.33	-0.66	-0.27	0.07
	-1.12	-0.44	-0.53	-0.45
	-0.21	-0.22	0.26	0.52
	-0.16	0.60	0.12	-0.03
	-1.39	2.60	1.31	-0.07
Net exports of goods and services Exports Goods Services. Imports Goods. Services. Services.	-0.28	-0.75	-1.40	-0.13
	-0.99	0.33	1.29	0.21
	-0.56	-0.23	0.99	0.26
	-0.42	0.56	0.30	-0.05
	0.70	-1.08	-2.69	-0.35
	0.37	-0.40	-2.74	-0.52
	0.33	-0.68	0.05	0.17
Government consumption expenditures and gross investment	1.85	1.04	0.27	0.35
	0.80	0.47	0.47	0.20
	0.54	0.46	0.32	0.22
	0.26	0.01	0.16	-0.02
	1.05	0.56	-0.21	0.16

Note. More detailed contributions to percent change in real gross domestic product are shown in NIPA table 8.2. Contributions to percent change in major components of real gross domestic product are shown in tables 8.3 through 8.6.

- tures increased about the same in both quarters, but gross investment steadied after decreasing.
- Nonresidential investment in equipment and software posted a healthy increase after a modest gain; the increases followed six consecutive quarterly decreases. In contrast, nonresidential structures decreased for the fourth quarter in a row.
- The production of goods increased 6.8 percent after increasing 0.4 percent. The production of services slowed, and the construction of structures decreased, though not as much as in the second quarter (table 3).
- Real motor vehicle output increased 42.2 percent after increasing 8.1 percent. GDP less motor vehicle output increased 2.0 percent after increasing 1.0 percent.
- •Inventory accumulation slowed, subtracting 0.07 percentage point from third-quarter GDP growth. In the second quarter, a swing from liquidation to accumulation had added 1.31 percentage points to GDP growth.
- Final sales of domestic product—GDP less inventory investment—increased 3.2 percent after little change.
- •Real final sales of computers increased 74.6 percent—more than at any time since the fourth quarter of 1995. Price indexes for most categories of computers decreased more than in the second quarter
- The personal saving rate decreased to 3.7 percent from 4.0 percent.⁴

Table 3. Real Gross Domestic Product by Type of Product

[Seasonally adjusted at annual rates]

	Billions of chained (1996) dollars Level Change from preceding quarter					Percent change from preceding quarter			
	2002	2001	2002			2001	2002		
	III	IV	I	II	III	IV	I	Ш	III
Gross domestic product	9,465.2	62.4	114.4	29.2	72.8	2.7	5.0	1.3	3.1
Goods Services Structures.	3,735.0 4,973.8 764.2	37.9 38.2 –11.3	72.6 34.1 11.6	3.6 42.3 –17.2	60.6 28.3 –10.7	4.3 3.2 -5.6	8.3 2.8 6.1	0.4 3.5 -8.4	6.8 2.3 -5.5
Addenda: Motor vehicle output Gross domestic product less motor vehicle output	379.1 9,090.6	12.4 51.2	7.9 106.9	6.7 23.3	31.9 44.7	16.3 2.3	9.9 4.9	8.1 1.0	42.2 2.0
Final sales of computersGross domestic product less final sales of computers						28.9 2.6	-7.8 5.1	13.1 1.2	74.6 2.8

Nors. See note to table 1 for an explanation of chained (1996) dollar series. Chained (1996) dollar levels and residuals for most items are shown in NIPA table 1.4. Detail on motor vehicle output is shown in NIPA table 8.9B.

^{3.} Imports of goods and services are included in gross domestic purchases but not in GDP. Exports of goods and services are included in GDP but not in gross domestic purchases.

^{4.} The personal saving rate is measured as personal saving as a percentage of current-dollar disposable personal income. The third-quarter estimate of the *national* saving rate (which is measured as gross saving as a percentage of gross national product) will be available at the end of November along with the "preliminary" estimate of third-quarter GDP.

Third-Quarter 2002 Advance NIPA Estimates: Source Data and Assumptions

The "advance" estimate for the third quarter is based on the following major source data; as more and better data become available, the estimates will be revised. (The number of months for which data were available is shown in parentheses.)

Personal consumption expenditures: Sales of retail stores (3), unit auto and truck sales (3), and consumers' shares of new-car and new-truck purchases (2);

Nonresidential fixed investment: Unit auto and truck sales (3), construction put in place (2), manufacturers' shipments of machinery and equipment other than aircraft (3), shipments of civilian aircraft (2), and exports and imports of machinery and equipment (2);

Residential investment: Construction put in place (2), single-family housing starts (3), sales of new houses (3), and sales of existing houses (3);

Change in private inventories: Trade and nondurable

manufacturing inventories (2), durable manufacturing inventories other than semiconductors (3), and unit auto and truck inventories (3);

Net exports of goods and services: Exports and imports of goods and services (2);

Government consumption expenditures and gross investment: Some Federal outlays were available for 2 months, others for 3, State and local construction put in place (2), and State and local employment (3);

GDP prices: Consumer price indexes (3), producer price indexes (3), U.S. import and export price indexes (3), and values and quantities of petroleum imports (2).

BEA made assumptions for source data that were not available. Table A shows the assumptions for key series; a more comprehensive list is available on BEA's Web site at <www.bea.gov>.

Table A. Summary of Major Data Assumptions for Advance Estimates, 2002:III

[Billions of dollars, seasonally adjusted at annual rates]

	2002						
	April	May	June	July	August	September 1	
Private fixed investment: Nonresidential structures: Buildings:	170 (170 5	1// 7	1/2.4	150.0	150.4	
Value of new nonresidential construction put in place	179.6	170.5	166.7	162.4	159.2	159.4	
Equipment and software: Manufacturers' shipments of complete aircraft	39.1	29.0	35.0	38.6	28.5	28.7	
Residential structures: Value of new residential construction put in place: 1-unit structures	260.5 35.1	260.5 34.4	260.0 32.8	260.2 32.9	258.3 34.6	261.4 34.9	
Change in private inventories: Change in inventories for nondurable manufacturing Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment	0.0 -22.9	-2.0 6.8	6.9 20.1	10.2 31.0	6.6 7.2	-1.0 1.0	
Vet exports: 2 Exports of goods: U.S. exports of goods, international-transactions-accounts basis	682.2 678.8 1.164.0	687.9 683.9 1.188.3	699.0 696.1 1.186.4	709.3 705.3	695.8 692.4 1,203.1	698.9 695.9	
U.S. imports of goods, international-transactions-accounts basis	1,160.8 -481.8 -482.1	1,184.5 -500.4 -500.6	1,183.0 -487.4 -486.9	1,174.6 -468.4 -469.3	1,199.9 -507.3 -507.5	1,211.6 1,211.6 –515.7 –515.7	
Government: State and local: Structures:							
Value of new construction put in place	183.6	187.9	182.6	184.9	186.5	185.7	

^{1.} Assumption

Prices, next page.

^{2.} Normonetary gold is included in balance-of-payments-basis exports and imports but is not used directly in the estimation of NIPA exports and imports.

Prices

The price index for gross domestic purchases, which measures the prices of goods and services purchased by U.S. residents, increased 1.4 percent in the third quarter after increasing 2.3 percent in the second. The slow-down was accounted for by a moderation in the prices of energy goods and services. Prices of gross domestic purchases less food and energy increased 1.4 percent, about the same as in first two quarters of the year (table 4 and chart 2).

Prices of goods and services purchased by consumers increased 1.9 percent after increasing 2.7 percent. Energy prices slowed sharply, mainly reflecting a much smaller increase in the price of gasoline and oil. (The average retail price of a gallon of regular gasoline changed little in the third quarter after increasing almost 25 cents in the second quarter.) Prices of electricity and gas and of fuel oil and coal also moderated. Food prices increased less than 1 percent for the second quarter in a row. Prices of other consumer purchases increased 1.9 percent, the same as in the second quarter.

Prices paid by government increased 1.4 percent, half as much as in the second quarter. Prices slowed substantially at both the Federal and the State and local levels, partly in response to moderating energy costs.

Prices of private nonresidential fixed investment decreased for the fifth consecutive quarter. A modest decrease in prices of equipment and software was only

Gross Domestic Purchases Prices:
Change From Preceding Quarter
Percent

6
Total
Less Food and Energy

4
2
1999
2000
2001
2002

Note-Percent change at annual rate from preceding quarter; based on seasonally adjusted index numbers (1996=100).
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partly offset by a small increase in prices of structures. The decrease in equipment and software was mainly accounted for by computer equipment and transportation equipment. Computer prices decreased at about their average rate over the past 3 years. Prices of transportation equipment decreased for the third consecutive quarter, mainly because of declining motor vehicle prices; the drop in prices of transportation equipment was the largest since 1972. Prices of residential investment increased slightly.

The GDP price index, which measures the prices paid for goods and services produced in the United States, increased 1.1 percent—0.3 percentage point less than the increase in the price index for gross domestic purchases. The GDP index, unlike the index for gross domestic purchases, includes the prices of exports and excludes the prices of imports. Import prices and export prices both increased in the third quarter, but the increase in import prices was somewhat larger than the increase in export prices. The price of imported petroleum increased substantially, though much less than in the second quarter.

Table 4. Price Indexes[Percent change at annual rates; based on seasonally adjusted index numbers (1996=100)]

	2001		2002		
	IV	I	II	III	
Gross domestic product	-0.5	1.3	1.2	1.1	
Less: Exports of goods and services	-3.8	-0.8	3.0	3.5	
	4.7	-1.6	11.1	4.8	
Equals: Gross domestic purchases	0.4	1.2	2.3	1.4	
Less: Change in private inventories					
Equals: Final sales to domestic purchasers	0.5	1.1	2.3	1.4	
Personal consumption expenditures	0.8	1.1	2.7	1.9	
	-1.5	-4.2	-2.9	-1.9	
	-3.5	0.2	4.6	0.6	
	3.5	2.7	3.0	3.3	
Private fixed investment Nonresidential Structures. Equipment and software Residential	-0.1	-1.5	-0.2	-0.5	
	-1.6	-2.0	-1.4	-0.9	
	-1.6	-3.6	0.7	0.7	
	-1.6	-1.5	-2.1	-1.4	
	3.7	0	2.6	0.4	
Government consumption expenditures and gross investment. Federal National defense Nondefense State and local	-0.3	3.6	2.8	1.4	
	-0.4	8.4	2.3	1.1	
	-1.1	7.3	2.0	1.2	
	0.7	10.4	2.9	0.8	
	-0.3	1.1	3.1	1.5	
Addenda: Gross domestic purchases: Food Energy Less food and energy Personal consumption expenditures:	2.3	2.4	0.4	0.7	
	-33.0	-8.7	29.9	3.6	
	2.0	1.4	1.5	1.4	
Food	2.4	2.4	0.5	0.9	
Energy goods and services ¹	-32.1	-9.1	29.6	3.3	
Less food and energy	2.7	1.4	1.9	1.9	

^{1.} Consists of gasoline, fuel oil, and other energy goods and of electricity and gas.

Note. Percent changes in major aggregates are shown in NIPA table 8.1. Index numbers are shown in tables 7.1, 7.2, and 7.4.

Personal Income

Real disposable personal income (DPI) increased 2.7 percent in the third quarter after increasing 3.6 percent in the second (chart 3). (During the expansion of the 1990s, it averaged a 2.8-percent increase.) Personal income, which is only available in current dollars, also increased less than in the second quarter (table 5). Personal outlays increased more than income (and more than in the second quarter). As a result, saving fell. Saving as a percentage of DPI declined from 4.0 percent in the second quarter to 3.7 percent in the third.

The slowdown in personal income reflected a downturn in rental income and decelerations in transfer payments and interest income.

The downturn in rental income reflected an upturn in expenses, specifically closing costs associated with mortgage originations. Spurred by historically low mortgage rates, refinancing reached record levels in the third quarter.

CHART 3 Selected Personal Income and Saving Measures Billion \$ CHANGE IN PERSONAL INCOME 240 180 120 60 Percent 20 CHANGE IN REAL DISPOSABLE PERSONAL INCOME 10 Percent PERSONAL SAVING RATE 2000 2001 2002 Note-Changes are from preceding quarter; based on seasonally adjusted annual U.S. Bureau of Economic Analysis

The slowdown in transfer payments was traceable to unemployment program benefits. The national unemployment rate dipped to 5.7 percent in the third quarter after increasing 0.2 percentage point to 5.9 percent in the second.

The deceleration in interest income reflected a decrease in interest rates. Many short-term and long-term rates dropped in the third quarter after little change in the second. (For examples, see the table "Domestic Perspectives" on page D-42.)

An upturn in farm proprietors' income and a small step-up in wage and salary disbursements partly offset these changes in rental income, transfer payments, and interest income. Farm subsidies increased about as much in the third quarter as in the second, and farm production income decreased less than in the second quarter. A step-up in wage and salary disbursements in service industries more than offset a slowdown in distributive industries.

Table 5. Personal Income and Its Disposition[Billions of dollars; seasonally adjusted at annual rates]

	Level	Change from preceding quarter			
	2002	2001	2002		
	III	IV	- 1	II	III
Wage and salary disbursements. Private industries. Goods-producing industries. Manufacturing. Distributive industries. Service industries. Government.	5,041.0 4,184.6 1,120.9 760.6 1,124.0 1,939.7 856.4	-22.3 -30.4 -16.7 -13.5 -12.2 -1.5 8.1	26.4 11.2 -6.4 -10.5 11.5 6.1 15.2	39.2 31.2 2.0 2.1 9.2 20.1 8.0	44.0 36.0 2.0 -0.9 4.7 29.2 8.0
Other labor income	617.2	3.9	14.4	13.4	13.1
Proprietors' income with IVA and CCAdj Farm Nonfarm	758.3 10.4 748.0	-1.1 -0.1 -1.0	17.1 2.5 14.6	-0.9 -14.2 13.3	10.8 2.9 8.0
Rental income of persons with CCAdj Personal dividend income Personal interest income	144.4 437.3 1,082.8	-1.5 6.3 -13.5	2.0 6.4 -3.0	12.2 6.6 12.4	-9.1 7.0 0.5
Transfer payments to persons	1,298.2	22.5	47.0	30.6	15.6
${\it Less:} \ {\it Personal contributions for social insurance} \dots$	386.9	-0.4	7.8	3.0	3.4
Personal income	8,992.4	-5.3	102.5	110.3	78.7
Less: Personal tax and nontax payments	1,118.0	127.8	-172.9	-9.6	-9.2
Equals: Disposable personal income	7,874.4	-133.0	275.5	119.9	87.8
Less: Personal outlays	7,584.4	107.6	66.7	81.6	106.5
Equals: Personal saving	290.0	-240.7	208.9	38.3	-18.7
Addenda: Special factors in personal income:					
In private wages and salaries: Effects of the September 11 terrorist attacks	0	3.3	0	0	0
In government wages and salaries: Federal pay raise Effects of the September 11 terrorist attacks	9.0 3.3	0 2.8	8.4 -0.5	0.6 0.3	0 -0.2
In transfer payments to persons: Social security retroactive payments Cost-of-living adjustments in Federal transfer	0	1.8	-1.8	0	0
programs Correction for error in indexing for social security and supplemental security income	13.5	0.7	12.8	0	0
benefits	0	-3.7	-0.5	0.1	-0.1
In personal tax and nontax payments: Federal tax law changes Refunds and State tax law changes	-42.9 -0.1	0 2.2	-42.6 -0.2	-0.3 0.2	0 1.0

Note. Most dollar levels are in NIPA table 2.1 IVA Inventory valuation adjustment. CCAdj Capital consumption adjustment.